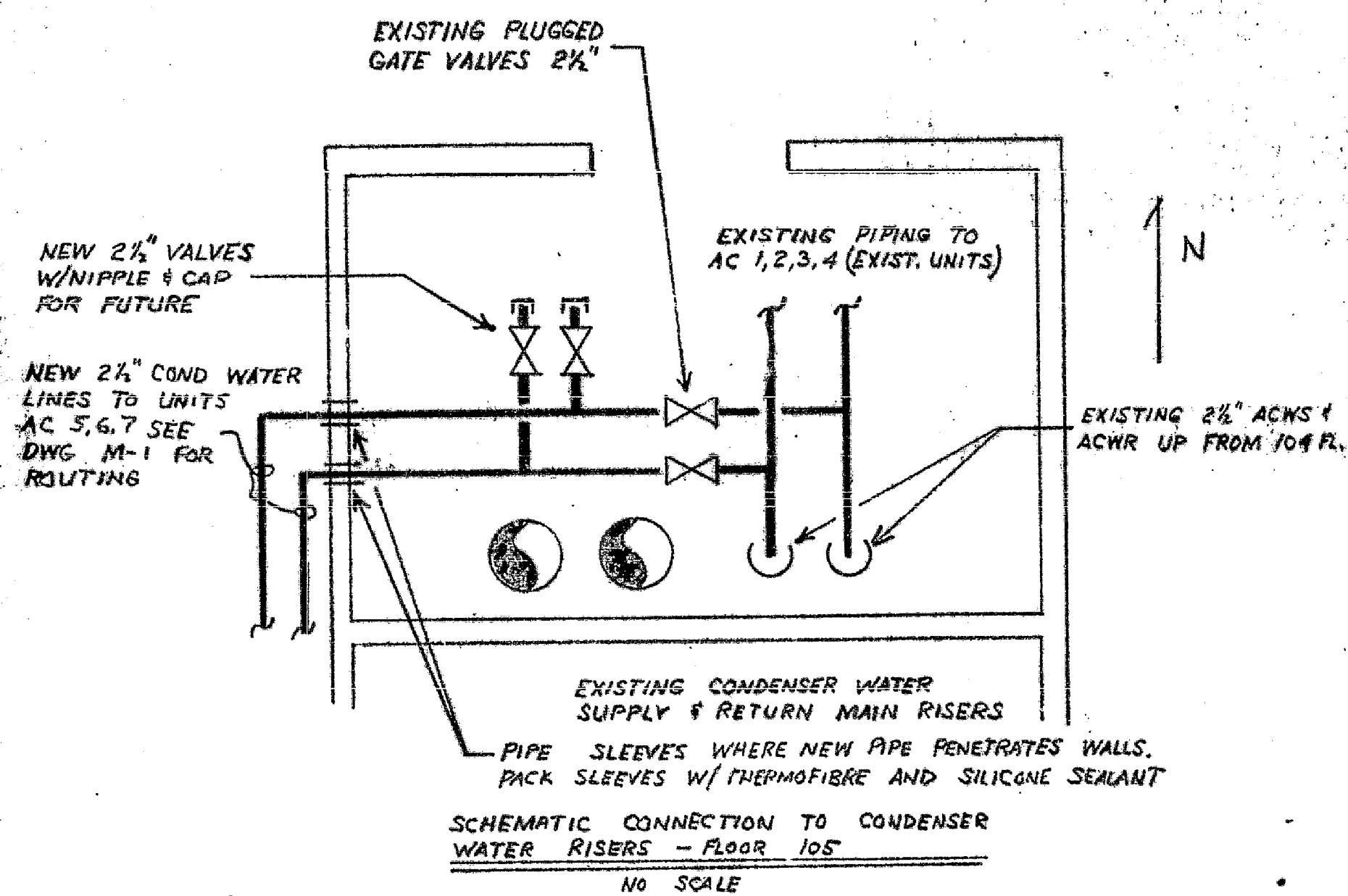
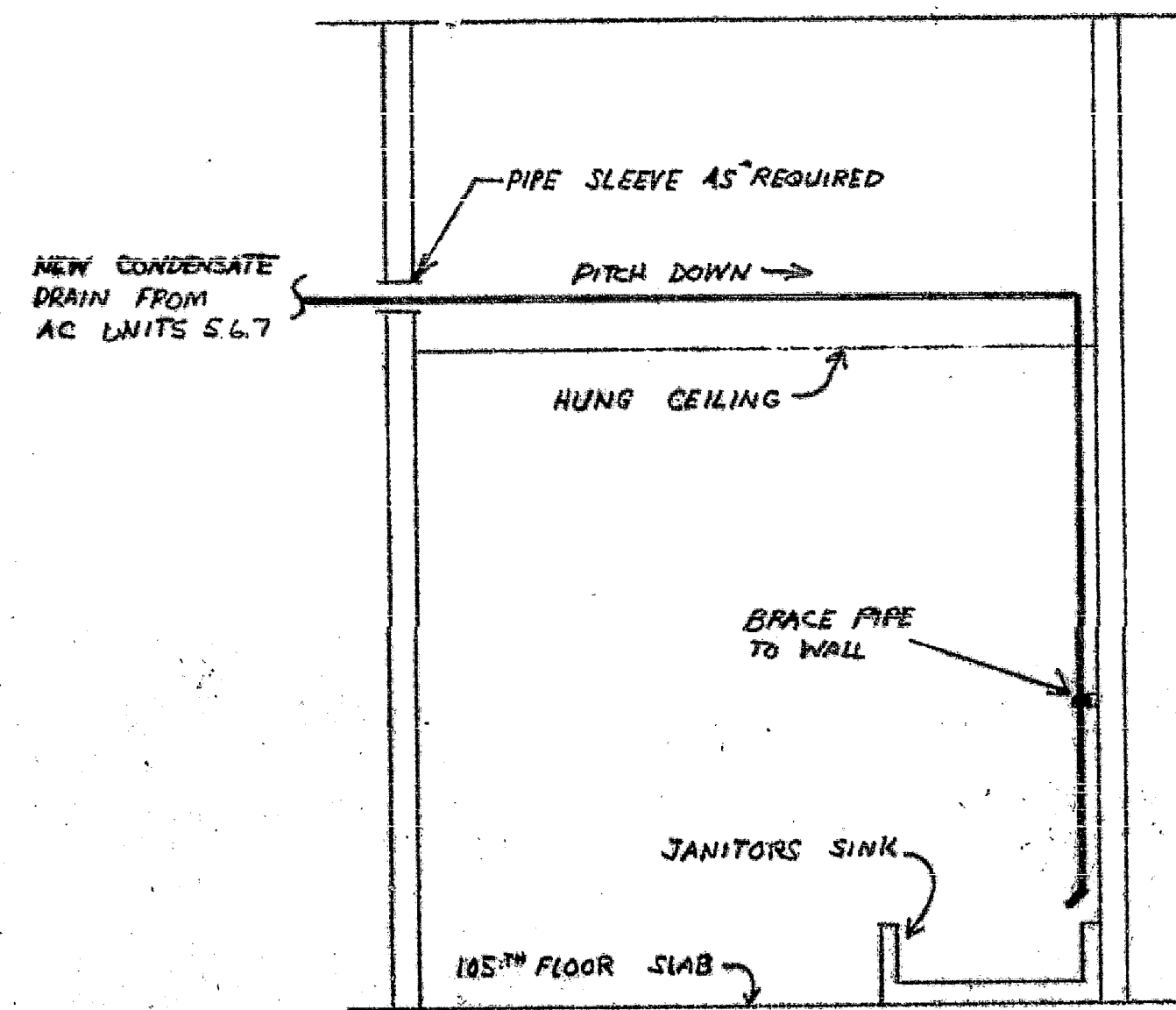
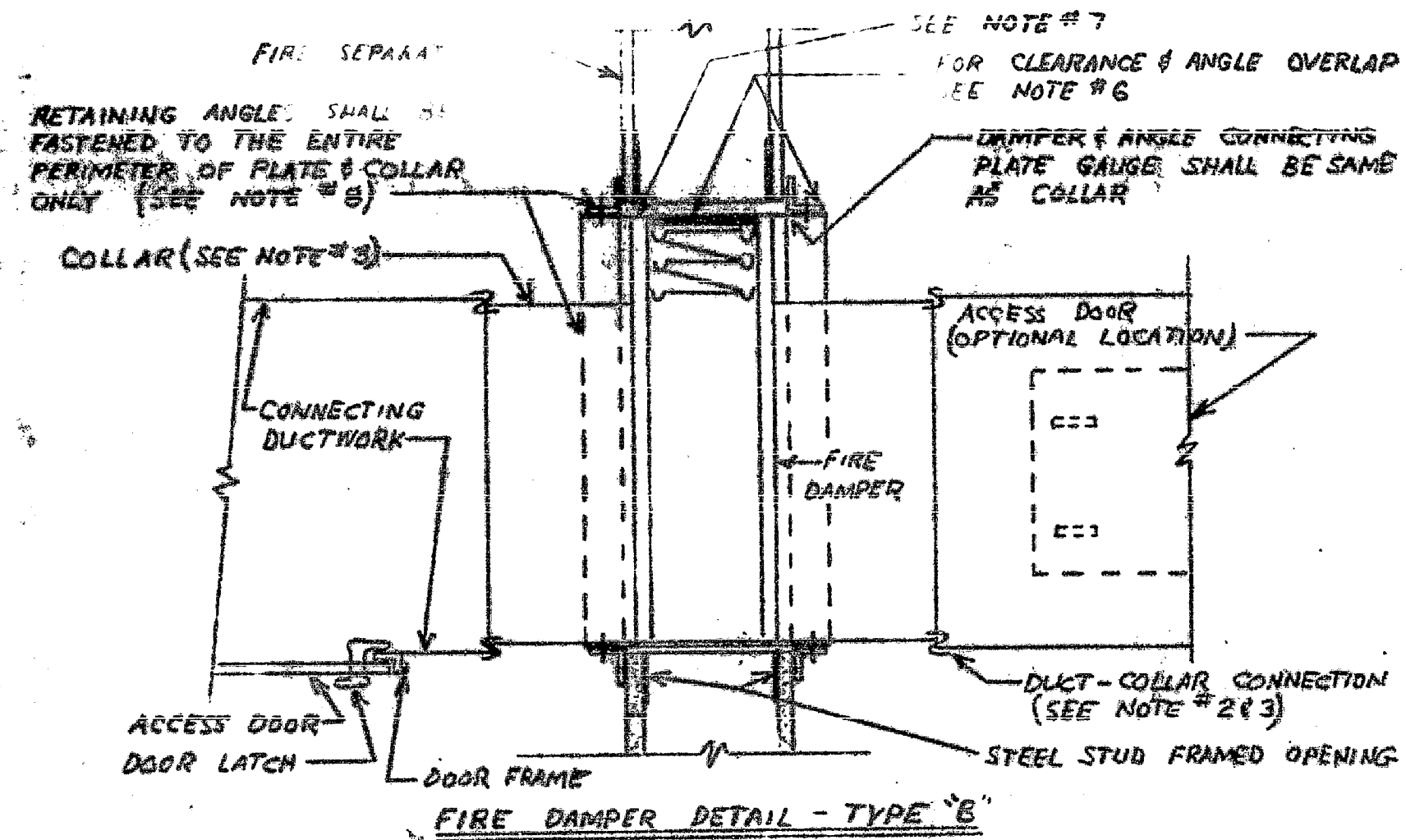


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CANTOR, FITZGERALD SECURITIES
579,417
H-3

DAMPER NOTE

1. ALL FIRE DAMPERS SHALL BE RATED TO MAINTAIN THE RATING OF THE FIRE SEPARATION. THEY SHALL BE APPROVED AND LABELLED BY UNDER- WRITER'S LABORATORIES (U.L.) AND BOARD OF STANDARDS AND APPEALS (B.S.A.). THE INSTALLATION SHALL BE IN ACCORDANCE WITH MANU- FACTURER'S (U.L.) APPROVED INSTRUCTIONS. DAMPERS SHALL BE AS MANUFACTURED BY AIR-SEALANCE INC., AIR-SEAL HFG. CORP., AIRSTREAM PRODUCTS CO. OR AN APPROVED EQUAL.
2. ALL DUCT-COLLAR CONNECTIONS SHALL COMPLY WITH ASHRAE AND SMACNA.
3. GAGES FOR COLLARS - RECTANGULAR SHALL BE AS FOLLOWS:
 - a) WHEN DUCT-COLLAR ARE CONNECTED BY A RIGID CONNECTION SIMILAR TO ANGLE REINFORCED STANDARD, ANGLE REINFORCED POCKET LOCK, OR COMPANION ANGLE - MINIMUM 16 GAUGE UP TO 36" WIDE X 24" HIGH AND 14 GAUGE - LARGER SIZES SHALL BE INSTALLED.
 - b) WHEN OTHER DUCT-COLLAR CONNECTIONS ARE UTILIZED, THE COLLAR GAUGE SHALL COMPLY WITH ASHRAE AND SMACNA.
4. GAGES FOR COLLARS IN ROUND DUCT SHALL BE A MINIMUM OF 18 GAUGE.
5. AFTER THE INSTALLATION OF DAMPERS, THE CONTRACTOR SHALL SEAL AND TAPE ALL JOINTS FOR AIR TIGHTNESS. SEALANTS USED SHALL BE 3M COMPANY NO. 880, MIRACRE ADHESIVE CORPORATION OR AN APPROVED EQUAL. SEALANT VENT DUCT SHALL BE AS MANUFACTURED BY HASKUA CORP. OR AN APPROVED EQUAL.
6. TO ALLOW FOR EXPANSION, DAMPERS SHALL HAVE A TOP CLEARANCE EQUIVALENT TO 1/8" FOR EACH FOOT OF DAMPER HEIGHT. THE SIDE CLEARANCE SHALL BE 1/8" FOR EACH FOOT OF DAMPER WIDTH DIVIDED BY TWO TO THE RIGHT AND LEFT OF THE DAMPER. THE MAXIMUM CLEARANCE FOR THE TOP AND THE TOTAL OF BOTH SIDES SHALL BE 1/2" EACH. THE RETAINING ANGLES SHALL BE 1 1/2" X 1 1/2" X 1/8", SO THAT THERE WILL BE A MINIMUM OF 1" OF OVERLAP ON THE FIRE SEPARATION.
7. DAMPER SHALL BE SECURED TO COLLAR WITH EITHER 1/2" TACKWELDS, NO. 10 SHEET METAL SCREWS, 1/4" DIAMETER NUTS AND BOLTS, OR 3/16" STEEL POP RIVETS, ALL 6" ON CENTER.
8. RETAINING ANGLES SHALL BE SECURED TO COLLAR, SLEEVE OR PLATE WITH EITHER 1/2" TACKWELDS, NO. 10 SHEET METAL SCREWS, 1/4" DIAMETER NUTS AND BOLTS, OR 3/16" STEEL POP RIVETS, ALL 6" ON CENTER.
9. WHEN THE HUNG CEILING DOES NOT HAVE REMOVABLE TILES, AN ACCESS DOOR (FIRE-RATED WHERE REQUIRED) SHALL BE INSTALLED IN CEILING NEAR LOCATION OF FIRE DAMPER.
10. ALL RETAINING ANGLES SHALL BE GALVANIZED STEEL.



	LIGHT FIXTURE
	NEW DUCTWORK
	EXISTING DUCTWORK
	PLUG VALVE
	GLOBE VALVE
	GATE VALVE
	AUTOMATIC CONTROL VALVE
	CHECK VALVE
	STRAINER w/BLOWDOWN
	PRESSURE GAUGE w/RANGE COCK
	THERMOMETER IN TEST WELL
	CAP
	PIPE SLEEVES
	ADMIN. UNIT
	CENTER GAGE
	REDUCER
	UNION
	SMOKE DETECTOR
	NEW MOTORIZED DAMPER
	EXISTING MOTORIZED DAMPER
	FLEXIBLE DUCT CONNECTION
	VOLUME DAMPER
	AC UNIT CONTROL THERMOSTAT
	FUSE

1. The electric transfer switch shall be manually set to allow either of the following to occur, but not both:
 - a) AC 5 and/or AC 6 will be able to run when called to do so by their separate thermostats.
 - b) AC 7 shall be able to run when called to do so by its separate thermostat.
2. When AC 5 (or AC 6) starts the two (2) new motorized dampers on its supply ductwork shall close fully and remain closed until the unit shuts down. When unit is not operating, these new motorized dampers shall open fully.
3. When AC 7 starts the three (3) new motorized dampers on its supply system shall close fully and the 3 existing motorized dampers on this system shall open fully. When AC 7 shuts down the 3 new motorized dampers shall open fully and the 3 existing dampers shall again modulate according to their present operation.

TC/TA NO. 1201
DATE APPROVED 12/1/81

REV 1	TO INCORPORATE PA COMMENTS	3/9/81
HERBERT SCHWARTZ P.A. 30 AVE NEW YORK NY 10011		
CANTOR FITZGERALD SECURITIES CORP #1 WTC FLOOR 105		
ACU #5647 - DETAILS		
DWN J.L.	CHK H.S.	12/7/81

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